

Compilation of Comments from Issue Paper #4

“What triggers a nondegradation review of potential impacts to high-quality waters?”

General Comments

- How will high quality waters be defined?
 - How will you know if an activity will lower water quality?
 - Should more resources be diverted toward creating standards for chemicals currently without standards?
 - When you review the results of nondeg reviews completed in the past, what does that tell you about the effectiveness of nond as a tool to protect water quality?
 - If there is no readily available ambient water quality data, how do we know it is a high quality water?
 - Can volunteer monitors be used to collect data to determine quality?
- Can LID practices be used to get an exemption from non-deg review? If you choose to not use LID (from a menu list), then go through more rigorous non-deg review.
- Skip items 7 to 11 and focus on the compliance assessments/audits and enforcement of the permits. We already have the tools to prevent degradation without adding another exercise that doesn't result in a different outcome.

Review Triggers

1) In the absence of adequate, readily-available ambient water quality data, and the inability to calculate assimilative capacity, should antidegradation review of high quality waters be triggered by specific activities (inferring that those activities will lower water quality)?

- Yes, usually we can anticipate how a proposed activity will affect water quality; although maybe not exactly.
- These should be activities that always require a non-deg review. I'm thinking power (ethanol/groundwater:surface: nuclear). Cumulative impacts inp. vs. non-what's baseline, development w/hard surfaces over a certain size, etc. No inference need be made about H2O quality, just that MPCA needs to track cumulative effects, good and bad, to effectively implement rules.
- Yes
- Yes
- Activities without treatment non-permitted activities.
- Criteria for activities triggering nondeg review should have a reasonable potential to degrade WQ
- Activities with WQ mitigation should be considered for exemption
- No, you need the data in order to do the review. You need the data in order to know if you have a high quality water or not.
- WMD, WD plan review update every 5-7 years each WD, WMO need to have plan updated through BWSR.
- Yes.
- You need baseline data first. Look to previously performed activities; which are closely related data.

- Yes, above a certain threshold.
- Yes.
- No, it should be watershed based and based on ambient water quality data. If doesn't have the data, need to get it.
- Maybe specific activities could trigger modeling (such as a large construction site). Concerned about doing nothing or waiting for data.
- How would this be possible? If its already high quality wouldn't we have to have readily available data to know that?
- EIS should be triggered as large enough project. If city has approved nondeg plan, nothing else required on individual permits.
- This comment is for 1), 2), and 3), No, assimilative capacity needs to be accomplished.
- Yes
- What are high quality waters? Any EIS/EAW, construction project larger then 50 acre, change rule.
- Yes, based on sufficient research for impacts of land use activities and BMPs effectiveness for NPS , stormwater and groundwater impacts.
- Through a scaled approach based on the level of risk and type of pollutant associated with an activity. Use a watershed for scaling.
- Need to narrow the number of parameters which the nondeg review. Cannot do it for everyone. Need to address Ag.
- Specific activities seem difficult in the large scale. Is it point source, is it covered under general stormwater permit. Does it directly discharge or does it travel some distance to the receiving water. What is the size, flow, load of receiving water and discharge. This should be scaled to watershed, flow and load somehow
- No! Presumed impact is unacceptable and places an unfair burden on the project proposed. Degradation should be technically demonstrated. A trigger that considers effluent offsets and netting as off ramps should be considered.
- Like PSD, but based on watershed (e.g., not 200,000 gpd but % of flow in watershed.
- Specific activities should not be placed in state rules because many things have to be assessed on case-by-base basis.
- No. This type of process results in some activities that do not need the review going through the process. Thus, applicant and state spend time for little environmental benefit.
- Yes, I am guessing that certain activities are notorious for degrading potential. (Mining, rail yards, chemical storage) just guessing.
- Need template for analysis – 30 MS4 nondeg plan all did different models and different assumption. Are they all appropriate?
- activities triggering review should be established first, prior to investigation of impacts on water quality.

- The federal air quality program designed to prevent significant deterioration (PSD) of air quality may provide a useful analogy or model for a revised anti-degradation review program for protection of beneficial uses in water quality in Minnesota. In fact, the counter part federal program for areas which do not meet National Ambient Air

Quality Standards (NAAQS) maybe a useful model for implementing TMDLs in impaired waters. Other features of other air programs, such as the treatment of Hazardous Air Pollutants (HAPs) may provide additional aid. Both attainment and non-attainment programs have triggers for initial inclusion in the program and for which changes trigger PSD or NSR review.

Whether or not an analogy to the federal PSD program is used, the anti-degradation rules need to be:

- Reasonable;
- Predictable; and
- Watershed based.

Overview of PSD and Non-attainment NSR air programs

In the air quality world, the US EPA has set NAAQS for 6 specific pollutants – called criteria pollutants. Areas of the country and the state which meet those standards (as determined by actual measurement of air quality), or areas for which the air quality cannot be determined, are designated as attainment areas. Those which do not meet the NAAQS are designated as non-attainment areas. NAAQS range from parts per billion (for PM and SO₂) to parts per million (for CO).

In non-attainment areas, states must develop State Implementation Plans or SIPs which contain specific steps which will bring the area back into attainment with the NAAQS. This is done on a pollutant by pollutant basis, so that an area may be in attainment for several criteria pollutants and in non-attainment for one or more criteria pollutants. Determining attainment with the NAAQS includes both ambient air monitoring and especially modeling to demonstrate that under all meteorological conditions and at all locations. SIPs can contain a variety of mechanisms to ensure attainment of the NAAQS, including rules, general permits and conditions in individual permits.

Once the area reaches attainment, the state must continue a SIP (called a maintenance SIP) to maintain the air quality at NAAQS levels and to prevent the area from falling back into non-attainment.

In Minnesota, currently all areas of the state are attaining the NAAQS for all criteria pollutants. However, this was not the case, and there are maintenance SIPs in place to maintain the NAAQS. For example, there is a CO SIP in place for the Twin Cities, which includes work practices (timed stop lights at critical intersections) and individual limits in permits. There is a maintenance SIP for the Pine Bend area of Dakota County, which includes individual limits in permits. These individual limits are typically more restrictive than technology based limits (e.g. New Source Performance Standards or even Best Available Control Technology).

An area can be in attainment of one or more criteria pollutant NAAQS, and in non-attainment of others at the same time.

In areas where the ambient air quality meets (is in attainment of) the NAAQS, new large point sources or significant expansions of existing large point sources must undergo an analysis called Prevention of Significant Deterioration or PSD. PSD reviews consist of the following elements:

- Technology review to determine Best Available Control Technology or BACT
- Ambient air quality modeling to demonstrate attainment and maintenance of the NAAQs (unless modeling demonstrates that impacts are below the Significant Impact Levels or SILs)
- Ambient air quality modeling to demonstrate protection of the increment
- Preconstruction ambient air monitoring (unless modeling demonstrates that impacts are below Significant Monitoring Concentrations (SMC))
- modeling to demonstrate that other Air Quality Related Values (AQRVs) are protected in Class I areas, and
- opportunity for public notice and comment.

Increment analysis (which is in many ways similar to an anti-degradation review) takes into account all increase and decreases from certain baseline dates (e.g. the date on which the first PSD permit was issued in a county or other geographic area).

In non-attainment areas, a similar, though more restrictive analysis must be undertaken, called a non-attainment New Source Review. The Lowest Achievable Emission Rate (LAER) control equipment must be installed, and any emissions increases must be offset by reductions in other sources. Modeling must demonstrate attainment of the NAAQS.

Initial inclusion Triggers under PSD

A PSD analysis applies to sources which emit more than 250 tons/year for a certain list of 28 large sources (e.g. power plants, refineries) or over 100 tons/year for other sources. (While this may seem like a lot of emissions, the total criteria pollutant emissions in Minnesota are nearly 4 million tons/year). In other programs (the Part 70 operating permit for example) a similar 100 tpy level is also set.

In non-attainment areas, all sources which emit more than 100 tpy are subject to NA NSR.

Expansion Triggers under PSD

When an existing large source wants to expand its emissions by more than a “significant” net amount (ranging from 15 tons/year of PM10 to 100 tons/year of CO), they too must undergo a PSD review.

A non-attainment NSR review generally applies to smaller expansions, sometimes as low as 5 tpy, depending upon the pollutant and how severe the non-attainment is in a certain area.

PSD “Off-ramps”

Sources can take off-ramps from the PSD program in a number of ways:

- Synthetic minor: even though a source has the potential to emit more than 100/250 tpy (e.g. operating at full production 24/7), it can take an enforceable permit condition limiting emissions to less than 100/250 tpy (along with monitoring, reporting and recordkeeping to demonstrate that it is staying below the limit.
- Netting: the source can make increases in one part of the operations, while decreasing in others, so that the “net” emissions increase is less than the significance levels (e.g. 15 to 40 to 100 tpy). This also is accompanied by monitoring, reporting and recordkeeping requirements
- Offsets: The source can make emission increases if other nearby sources agree to make decreases which not only match the emissions increase but have the same ambient impact. The other source must take enforceable permit conditions, and modeling is often required (depending upon the pollutant) to demonstrate equivalence. Again, monitoring, reporting and recordkeeping are required for both sources to demonstrate compliance with limits.

Analogy to anti-degradation and implementation of TMDLs

An impaired water would be analogous to a non-attainment area. As with air quality, a water can be impaired for one pollutant, while meeting water quality standards and designated uses for others. Impaired waters need a “SIP”, which in the water quality arena would be the TMDL and associated implementation plan. There can be no “new or expanded” discharge to an impaired water of the impairing pollutant (per 40CFR 122.4(i).

Waters meeting water quality standards and designated uses are attainment areas. A non-degradation analysis is the counterpart to a PSD permit in air. A control technology analysis must be completed to determine whether additional control measures beyond those required by subpart 3 can reasonably be taken to minimize the impact of the discharge on the receiving water. MN. Rules 7050.0185, subpart 4. An additional analysis must be made which “consider[s] the importance of economic and social development impacts of the project, the impact of the discharge on the quality of the receiving water, the characteristics of the receiving water, the cumulative impacts of all new or expanded discharges on the receiving water, the costs of additional treatment beyond what is required in subpart 3, and other matters as shall be brought to the agency's attention.” Ibid.

ORVWs and OIRWs can be considered as Class I areas, and impacts from upstream waters must be considered on these waters as well. For certain waters, discharges are prohibited, and where allowed, must meet much more stringent “tests” for technology review and determining whether or not the discharge will be allowed. See MN rules 7050.0180.

So can we use the triggering levels, mechanisms and off-ramps of the PSD program as an analogy for anti-degradation triggers, mechanisms and off-ramps?

The 100 tpy major source threshold represents about 0.02% of the total sources for each pollutant – see attached table. Alternatively, it represents about 0.3% of all point sources. This might be a reasonably small fraction of the entire inventory, below which one would consider impacts to be negligible. One could also note that multiple sources below these levels would not be a large impact (it would take, for example 3 new sources to reach 1% of all point sources, or 50 new sources to reach 1% of the entire inventory).

How would this work, say, for TSS and phosphorus loadings on Lake Pepin (the only published information readily available on loadings)? Admittedly, Lake Pepin is impaired, and a TMDL planning process is underway, but it might be useful to see how the off ramps in the air quality PSD program would work in a water quality program.

Loading on Lake Pepin for TSS and P were a total of 2,710.9 Mt/d and 9.7 Mt/d, respectively, with the distribution as shown in the chart below. If we assume that the Metro WWTP represent all point sources (an underestimate, but perhaps close, given the population of the Twin Cities), 100 tons/year represents 0.006% of point sources, and 0.000001% of all sources. This seems a little low. Setting the threshold at 250 tpy yields 0.01% of point sources and 0.00003% of all sources, which might be reasonable for the Lake Pepin Watershed.

For phosphorus, 100 tpy yields 0.02% of point sources and 0.003% of all sources, which might also be reasonable for the Lake Pepin.

It would be reasonable to set different thresholds for different pollutant, and using a percentage of either the point source or total loadings to the watershed would be reasonable, even though it resulted in a different mass loading, depending upon the size of the watershed. One would expect, for example, that there would be a lower tpy level for a single lake or a small watershed or sub-watershed.

Setting a threshold based on mass would be more reasonable than the current thresholds of 200,000 gpd. Approached another way, a 200,000 gpd plant discharging at the secondary treatment threshold of 30 mg/L is about 9 tons/year of TSS. The same plant discharging 1 mg/L is about 0.3 tons/year of phosphorus. This seems low for the Lake Pepin Watershed, though it might be appropriate for smaller watersheds. Rather than setting a single flow limit, a percentage of the mass loading to a watershed would seem to be more reasonable.

Off-ramps

Off ramps, similar to the PSD program should be established for anti-degradation. Currently, there are two off-ramps provided for in MN Rules 7050.0185, Subp. 2, under the definition of “significant discharge”:

- New or expanded discharges of less than 200,000 gpd or
- New or expanded discharges of toxic pollutants which increase the concentration in the receiving water by less than 1%

As noted above, the 200,000 gpd threshold might be appropriate in the Lake Pepin watershed or similar, large watersheds, but it may be too large for smaller watersheds, especially individual lakes. A better approach might be a mass loading limit, equivalent to a small percentage of the loading on the watershed.

Permittees should be able to become “synthetic minors”, by taking permit limits to stay below the thresholds. For example, even though a point source has the capability of discharging more than, say x tons/year into a watershed, they could take a limit which takes them below the threshold, through a combination of additional treatment, water conservation or re-use, I/I reduction or other means.

Permittees should also be allowed to net out or offset any increases (including any increases from new dischargers), by making reductions at other point and non-point sources. Such reductions would need to be quantified and verified, with on-going measurements to assure continued compliance.

Thus, trading should be allowed, within watersheds, to offset or net out of increases. The trading rule, currently under separate development, acknowledges the potential use of trading as one of the additional control measures which might be considered. In addition to this use, trading should be allowed for netting out or offsetting new or expanded discharges to stay below the significance thresholds.

2) If so, in addition to those listed on page 2, what specific activities should trigger a nondegradation review?

- The list is pretty good but general.
- Any activity. E.S.A. says any activity, even with beneficial effects, needs to undergo review (if funded, authorized, or carried out by tests).
- Large new CAFOS/feedlots (5000 AU and up). Don't do non-deg for future permits after initially permitted.
- Large mining/quarry operations with direct hydrologic or hydrogeologic impacts.
- Other new large industrial complexes in rural areas, not to apply to existing facilities.
- Changes in land use (maybe over a certain size), new tiling of crop land, feedlots under 100 AU's (animal unit), industrial activities.

- If the permits are effective tools in preventing degradation, then perhaps the state can do nondegradation reviews of those activities (e.g., row crop farming)- particularly an assessment if in-place BMPs.
- need to work on this criteria
- EAW EIS review process could be part of a trigger since it is sent to MPCA staff- different area but process should include the areas of MPCA.
- New field tiling, fertilizer application, wetland alteration.
- Any project that requires an EIS (or even an EAW) should have non-deg review as part of the environmental review. Or any 50 acre + (impervious) project (or some appropriate limit).
- If countywide plan exists and approved, all activity following that plan could be excluded.
- Triggers need to be simple thresholds and then review can go into more detail.
- Unpermitted non-point sources should trigger nondeg reviews. I don't know how this would happen since they are not covered by many rules/regs, etc., but they have a huge impact on WQ and for the most part go unchecked. Flow is a good example where non point flow such as drainage goes unchecked but has a negative impact.
- Large development projects and large industries that affect land use over a large number of acres (e.g., bio fuels industry).
- Large change in land use may be part of the equation.
- Agriculture.
- If the project requires environmental review or creates increase of volume discharge.
- Need to look @103b rule for watershed to address.
- Re-look @ construction requirement – somewhere between impaired waters and special ORVW.
- Water transfers given change in USEPA NPDES permit rule not to require NPDES permits for transfer. EAW/EIS w/water quality impacts.
- Unknown- a list of absolutes may be excessive. Some new permitted activities may be very small or very clean w/little or non pollution risk.
- Be careful how you word the activities, I see a problem with “potential” this leaves too much room for interpretation. The types of activities listed seem to make sense. Prefer not listing activities (where do you stop? Level of interpretation)?
- Scale to “receiving water” may not be waters of state; question on what is area of review and path to receiving water. Maybe then considering flow and load.
- Requiring applicant to provide monitoring data can and will likely provide inadequate results due to limited duration of data.
- Need to define economic benefits of high quality waters.
- Activities that should trigger review in addition to those listed on page 2 of Issue Paper 4 are:
 - water appropriations requiring a permit under Minn. Stat. 103G with the potential to degrade high quality waters;
 - drainage improvements and repairs under Minn. Stat. 103E;

- a request upon demonstration with evidence of the potential to degrade high quality waters;
- modified or reissued individual NPDES permits: a) with expanded average wet weather design flow and b) where existing permitted flows and effluent limits have not undergone anti-degradation review if initial permitting or permit modification occurred after November 28, 1975 (the applicable date of federal anti-degradation requirements).

3) Should any of the specific activities listed on page 2 not be included as those that would trigger nondegradation review?

- I thought the list was good.
- No exemption. Even restoration activities should need review. For example, what if all stream land restorations in the Zumbro watershed happen May-August, and due to earth moving, cause a high degree of degradation. Don't know if not tracked/measured.
- No
- If an activity can demonstrate they are implementing recommended BMPs, they should not have to go through the nondeg review process.
- 404, 401
- Special activities covered under GPs
- Yes, activities 401 Water Quality Certifications and 404 permits (dredge and fill permits).
- Need to be clear that each individual construction project doesn't trigger a review.
- General permit re-issuance, may be hard to get handle at large scale.
- 404 permit.
- Make an exception for approved LID programs? Make a LID certification?
- Keep as is.
- Not that I can see.
- No.
- No.
- I would question whether general permits would trigger nondegradation. GAP's are for de minimus activities. The approach being implemented is to require BMP's for all water and additional BMP's on special waters. 404 should not be included.
- Assumed impact to WQ needs some sort of documentation i.e., model, empirical evidence. An expanded discharge at some level may not require a review. Also some increase in flow and decrease in either load or concentration maybe of benefit to receiving water. What about seasonal implications that may not impact or may help flow conditions?
- Not environmental review, some ER triggered by non-water impacts (e.g., air emissions).
- Climatic issues during that period., etc.
- I like 110% aspect for economic justification. In lieu of 110% may be at a \$/ac that is required, e.g., RWMWD & CRWD use 40/ac for ...

- Activities listed on page 2 as **not** triggering review that should be reviewed are:
 - Re-issued NPDES w/o change in discharge if subject to bullet #4 above;
 - Modified NPDES w/ discharge less than or equal to presently authorized loads if subject to bullet #4 above.

Review Exemptions

4) Should there be specific activities that are exempt from antidegradation review (such as those listed on page 2)?

- Those listed seem reasonable, even though they are fairly general.
- CMPs that are (second bullet) put in place to improve water quality. Sometimes, BMPs take a while to improve water quality and sometimes water quality gets worse in short term (ditch repair, stream bank stabilization).
- Yes, permits with a history of permit compliance.
- Activities regulated by watershed organizations WMO, WSD should be exempt
- Individual construction projects.
- Small projects 1 to 5 acre developments. BMP use on projects both during and post construction if BMPS are in place and working then those are exempt.
- Yes, to reduce number of reviews.
- I guess so.
- Probably, but it will be difficult to come up with a list that is comprehensive and agreed upon by all.
- Yes, some of the activities should be exempt.
- This is for 4 and 5 both. Possible to identify activities, either by (e.g.) % impervious, const. cost, etc.
- List looks good.
- Sm proj/city watersheds that have WQ plan.
- Approved LID projects, incentive to activities.
- Yes
- Activities under general permits at some de minimus level modeled at some level.
- Yes. This is necessary just from a workload management standpoint of the state.
- Trading in watershed should be allowed.
- Activities listed on page 2 as not triggering review that we agree should not are:
 - Ground water clean-ups;
 - Projects aimed at improving surface water quality (needs careful definition so as not to exempt those projects that have a clean up component but may adversely impact receiving or downstream waters);
 - Re-issued and modified NPDES where authorized pollutant loads for each parameter discharged have already undergone review.

5) If so, in addition to those listed on page 2, what specific activities should be exempt from nondegradation review?

- Permits are issued to protect public waters. If our permits are well written and implement and enforced do we need additional non-degrad review? Effluent limits drive treatment permits.

- We should look into compliance w/NPDES permits = no non-deg review necessary.
- Loads accounted for in local water plans
- When there are no best available practice or not enough studies or research to get to the standard set. Must set standards that are attainable within reasonable costs benefit/cost.
- Any low-impact development that's "approved" and relatively certain not to degrade water.
- Need to think on that.
- Size of watershed should be a factor.
- Should better define economic practical for project.
- Watershed plans – agree w/comment to exempt where plans are in place.
- Supports intensive watershed based strategy.
- TMDL implementation plans and projects.
- Unknown
- EAW/EIS should be exempt from nondeg because the permit would be the instrument.
- Zero discharge facilities.
- look at seasonality
- Should be able to net out.
- As above, note depends on pollutant and flow. Maybe some activities such as ZLD site required to ...flow may actually be an improvement.
- Ability to net out, synthetic minors, predictable.
- Need to discuss applicability to stormwater, what is design storm? Pollutants of concern?

6) Should any of the specific activities listed on page 2 not be included as those that should be exempt from nondegradation review?

- No-they all seem reasonable.
- They are ok.
- If groundwater clean-up activities (pump-outs) will be discharged to receiving waters, they should not be exempt.
- Skip questions 6,7,8,9,10,11 and focus on compliance assessments/audit and enforcement of the permits. We already have the tools to prevent degradation without adding another exercise that doesn't result in a different outcome.
- No. Will credit be given for prior treatment measures in place and maintained.
- Question groundwater cleanup projects where groundwater contains pollutants such as phosphorus (gravel mining or arsenic for example).
- No
- Projects designed to improve WQ might need a closer look as they may improve for some parameters but degrade others.
- Which ones on pg. 2? First list is activities that would, another is activities that would not.
- If approved nondeg/should have free pass for TMDL and NPDES process.

Minimum Thresholds

7) Should there be a minimum threshold or *de minimus* below which nondegradation review should not be triggered? If not, why?

- This gets really hard. Its arbitrary 10% to a cap of 20% - 1st come 1st served. How to think of critical activities- what really contributes to the “public good”.
- No, due to cumulative impacts. Cannot determine cumulative effects if not measured.
- No, this will be complicated and will be abused and up for a large amount of interpretations.
- No, those under the threshold could add up over time and may end up impacting water quality
- yes
- Yes, but it is very hard to build a project in those limits. It’s good in theory.
- No, this may lead to a trend of pushing more projects into this category. Human nature will/may lead to more projects falling into the category to decrease workload/paper work.
- No de minimus unless nondeg reviews take into account accumulative effects from other activities. Of course this would be difficult to accomplish unless the activities occur at the same time and would, therefore, allow a combination of the multiple effects. Therefore, no de minimus.
- Yes, otherwise program will become ineffective due to not having adequate resources to implement.
- Yes, will we get the net benefit of the work of regulating every activity?
- There has to be something, I like a 20% total cap on using assimilative capacity each individual applicant can use 10% of whatever is left at the 20% (they could even install BMP’s of previous uses and “buy” some of their AC use back), but 20% total AC use is a hard cap. If there is a solid model that says they’re not using more than 10%, they’re exempt. But you can’t have a de minimis for a cap, because you will end up going too far down w/small degradations w/out truly knowing it until its too late.
- Cities may have spent much \$ to improve levels from 1988. If current levels become new base level for nondeg review it appears cities are being punished for being proactive.
- Yes.
- Yes, but needs to be low.
- Need to determine TAC and allow for improvements.
- How much? 0.1 or 0.2?
- Mixed feelings on this. I like Oregon model – generates first in first right dynamic.
- Unknown-seems appropriate, but insufficient knowledge to comment with specifics.
- Yes, de minimis is necessary
- PSD like
- Predictable.
- Watershed based.

- Depends on activities (point vs nonpoint) for value. I think there needs to be esp. for nonpoint, stormwater etc. Just do to the number of entities and potential distances from impacting waters.
- Yes. The air quality NSR/PSD program should be used as a model. Otherwise, development in the state will slow drastically if not stopped. The staffing and resource burden on the MPCA, municipalities and industry will be overwhelming. Few nondeg. analysis could be handled.
- Yes, scaled to watershed.
- Yes
- I think a 10% de minimis is okay. We don't want to degrade water-even a little at a time, but we could regulate ourselves to death.
- Need process so last one in does not get screwed because TAC has been used up.
- In general, significance thresholds below which the activity proposed does not trigger review should not be utilized. If there is a class of activity or threshold at which an activity does not have the potential to degrade water quality, it should be added to the list of exempt activities. MN's existing "significance threshold" of .2 MGD for a WWTF allows water quality degradation without review and does not comport with federal law.

Once a proposal enters review, water quality impacts should be determined. Blanket dismissal of a project from "necessity analysis" because it will consume ten percent or less of assimilative capacity is unacceptable, as it would allow major new loadings to large waterbodies like the Mississippi River without review. A ten % threshold (determined parameter by parameter) may be appropriate for 1st and 2nd order streams. Current MN Rules use a review threshold of 1 % for toxic pollutants (as an increase in concentration in the receiving water). This requirement should be not be altered if the state chooses to use a higher percent consumption of assimilative capacity for conventional pollutants. Any threshold based on percent consumption of assimilative capacity must be accompanied by a cumulative cap.

For conservative elements such as phosphorus and nitrogen that are demonstrably causing hypoxia in the Gulf of Mexico, and/or downstream impacts within Minnesota, dismissal from review based on a percentage consumption of assimilative capacity in the immediate receiving water is inappropriate unless the new discharge also falls within a cumulative cap established to protect the affected downstream resource.

8) If so, should it be based on assimilative capacity, on the type of activity or other criteria?

- Maybe a combination of both.
- If it had to be done, they all present their challenges and assumptions.
- needs discussion. Possible combination or separate process for different waters/activities
- Assimilative capacity might be most realistic.
- A.C.

- Everything needs to be based on assimilative capacity.
- Based upon A.C. risk, what if A.C. is already used up? Problem w/using type of activity.
- Who will determine AC, at what cost? Where do the funds come from? AC probably not known on most lakes now. Watershed approach makes sense but still things to be worked out before this can be used.
- Ultimately an assimilative capacity – activity only interim limited.
- Assimilative capacity w/cap.
- Assimilate capacity and load/concentrations at the receiving water may be not waters of the state.
- Similar to the air NSR/PSD program, there must be a finite list of parameters to address. Surrogate parameters should be considered such as suspended solids for a group of metals.
- Base it on likelihood of degradation, which may or may not affect assimilative capacity.
- I think that if the quality of the water is higher than its designated use, we should try not to degrade away the assimilation capacity and then start to regulate.
- What about non regulated activities?

9) At what level should the threshold(s) be set (whether based on assimilative capacity, activity or other criteria)?

- We don't want to degrade public waters down to standards, which would be a race to the bottom. Not all contaminants have standards.
- They should be set in an "absolute" fashion, that is, one that does not allow a piece of the pie to be eaten, the gap in the pie closed pushing the remaining pie together, and then allowing another % of pie to be taken. Absolute implies only 3 pieces of pie can be taken from original total.
- Research based standards based on activities.
- A reasonable level that we can maintain.
- Should depend upon waterbody and parameter of concern.
- Low – we need resource protection not a license to pollute.
- One idea advanced was variable based on actual use/class.
- Unknown.
- Scale to watershed/receiving water size and change in flow and load., i.e., possible higher flow lower load or vice versa.
- Unable to respond at this time without seeing data.
- Any activity that degrades by 10% or more, if there is assimilative capacity.
- Wrap into watershed approach process. Deal w/TMDL's and nondeg at same time. Establish assimilative capacity and cumulative impact.

Scaled Approach

10) Should there be different levels (scaled approach) of nondegradation review? (For example: Different types/levels of activity, the amount of assimilative capacity used, other changes in water quality or probability of degradation)

- Probably, but the decision making should be through a consensus of local agency, public and state level people.
- Could lead to “arbitrary & capricious” ruling. Not treating potential for harm the same. But, if based on empirical evidence, tiering could be allowed. All power projects or all development over 5 acres of new hard surfaces, for example, could be tiered differently than modifying a permit. But as #2 answers.
- When I think about waters or MPCAs online permitting processes for stormwater, I’m thinking of the \$400 permits, it’s a joke (sorry). You fill out all the information, pay \$400, and in a day your permit is in the mail. It lends to a sense of no oversight, zero likelihood that anyone is coming to check on you. Just say what you need to say online, get your orange placard, and post it on your work site. Then, do what you need to do to get the job done. It feels a bit Mafia-like. I’d hate to see that impression repeated in this process. OR & WV seen like good templates. NEPA process also good template.
- Yes, by levels of activity.
- This idea should be looked into further, sounds like a risk based approach.
- Less review where watershed districts already regulate
- Who is going to determine and keep track of assimilative capacity? Who is going to make sure that waters are classified correctly (many waters were given the default 2B std., Who is going to update the classes/standards)?
- Who is going to specify which waters are Tier 1 or Tier 2?
- Does non-deg review only apply if you are dealing w/a Tier 2 water?
- Yes
- Yes
- Yes and no. On paper or in rule there should be no difference in any of the nondeg review requirements. In practice the level would change based on complexity of the activity and assimilative capacity used.
- Yes, but trick will be to make fair for all. Until agriculture is a player, won’t be. Should be based on assimilative capacity.
- Yes
- I support the scaled approach. This will aid industry and government.
- Incorporate into EAW process. Amend EQB rule.
- This approach makes sense. However, as Bill stated, the intent is to reduce burden on regulated community and administration of rule. Burden will likely fall on cities.
- Yes, there should only be very few full nondeg reviews.
- Can we identify WQ impacts of each land use/risk of each land use?
- See comment under #1.
- Scaled approach based on the watershed (81 watershed)
- Based on level and flow

- Some type of weighted review base on flow, load, concentration and watershed size.
- Yes
- Yes like PSD-synthetic minors, NSR and NA.
- Performance based rules that allow flexible activities or BMPs seem to work best for statewide rules.
- Probably.
- Yes, more intense activity should receive more scrutiny.
- Yes. Small projects can't bear expense of nondeg review. As long as they follow rules, let it go.
- Not sure. What has been suggested or tried elsewhere that would serve to protect water quality? This seems to be another way of asking "what should trigger review." Once in review, what would *different levels of review* mean? Maybe for common activities (such as reviews of wastewater treatment plants) guidance containing a specific list of alternatives to consider, and social/economic factors to be provided could be developed (or revised to the extent such an approach is already in use).

11) What would be the advantages and disadvantages of a scaled approach?

- Cost saving in using scaled approach, but what impact on water quality over time - cumulative effects – loss of high quality waters.
- See #10.
- Could lead to confusion by what level activity a project fits under.
- Resources could be better managed (put resources into the bigger problems)
- inconsistency
- Good for major changes to landscape i.e., from farmland to forest.
- Allows a case by case approach.
- Trying to figure out what the levels should be (negative) not applying the same standards for all waters/activities (positive).
- Save cost and time/higher risk of degradation.
- Limit impact to operations, gov. agencies.
- More complex but could address scale of review and watershed.
- This could be tied closely to a de minimus approach. In significant and minor impacts should be addressed differently then major impacts.
- Adv: administrative burden, all parties.
- Save time, if there is a short review for small projects and a long review for big projects.
- Contractor, landowner, local and state agency lack of awareness and lack of expertise to assess factors a major obstacle to applying these rules.
- The ultimate product of the nondeg. process must produce a standard approach with predictability for the permittee to develop a predictable budget and schedule to proceed, with a nondeg review. A black hole for cost and time will not be tolerated!